ABSTRACT OF THE DISCLOSURE

SYSTEM AND APPARATUS FOR PHOTOLITHOGRAPHY

A photolithographic apparatus, system and method employing an improved refractive medium. photolithographic apparatus may be used in an immersion 10 lithography system for projecting light onto a workpiece such as a semiconductor wafer. In one embodiment, the photolithographic apparatus includes a container containing a transparent fluid. The fluid container is positioned between a lens element and the wafer. The container is further characterized as having a substantially flexible and transparent bottom membrane contacting an upper surface of the wafer and overlapping at least one side edge of the wafer such that a fluid filled skirt is formed extending beyond the edges of the wafer.

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